

1 **Protection for Threatened and Impaired Watersheds, 2000**

2 Proposed Rule Language

3 **TEXT OF MODIFIED REGULATIONS**

4 [from March 15, 2000]

5 **Amend § 895.1. Definitions.**

6 **Note: The following nine definitions may be added to this section in**
7 **alphabetic order.**

8 "Bankfull stage" means the stage that occurs when discharge fills the
9 entire channel cross section without significant inundation of the adjacent
10 floodplain, and has a recurrence interval of 1.5 to 2.0 years.

11 "Beneficial Functions of Riparian Zone" means the specific role of the
12 riparian zone to provide protection for water temperature control, streambed
13 and flow modification by large woody debris, filtration of organic and
14 inorganic material, upslope stability, bank and channel stabilization and
15 vegetative structure diversity for fish and wildlife habitat.

16 "Channel zone" means that area that includes a watercourse's channel at
17 bankfull stage and a watercourse's floodplain, encompassing the area between
18 the watercourse transition lines.

19 "Inner Gorge" means a geomorphic feature formed by coalescing scars
20 originating from landsliding and erosional processes caused by active stream
21 erosion. The feature is identified as that area situated immediately
22 adjacent to the stream channel below the first break in slope.

23 ~~"Saturated soil conditions" means 1) the wetness of the soil within a~~
24 ~~yarding area such that soil strength is exceeded and displacement from timber~~
25 ~~operations will occur. It is evidenced by soil moisture conditions that~~
~~result in: a) reduced traction by equipment as indicated by spinning or~~
~~churning of wheels or tracks in excess of normal performance, or b)~~
~~inadequate traction without blading wet soil or, c) soil displacement in~~
~~amounts that cause visible increase in turbidity of the downstream waters in~~
~~a receiving Class I or II watercourse or lake. Soils frozen to a depth~~
~~sufficient to support equipment weight are excluded. 2) soil moisture~~
~~conditions on roads and landings, in excess of that which occurs from normal~~
~~road watering or light rainfall that will result in the significant loss of~~
~~surface material from the road and landings in amounts that cause visible~~
~~increase in turbidity of the downstream waters in a receiving Class I or II~~
~~watercourse or lake that site conditions are sufficiently wet that timber~~
~~operations displace soils in yarding or mechanical site preparation areas or~~

1 displace road and landing surface materials in amounts sufficient to cause a
2 turbidity increase in drainage facilities that discharge into Class I, II,
3 III, or IV waters, or in downstream Class I, II, III, or IV waters that is
4 visible or would violate applicable water quality requirements.

5 In yarding and site preparation areas, this condition may be evidenced
6 by: a) reduced traction by equipment as indicated by spinning or churning of
7 wheels or tracks in excess of normal performance, b) inadequate traction
8 without blading wet soil, c) soil displacement in amounts that cause visible
9 increase in turbidity of the downstream waters in a receiving Class I, II,
10 III, or IV waters, or d) creation of ruts greater than would be normal
11 following a light rainfall.

12 On logging roads and landing surfaces, this condition may be evidenced
13 by a) reduced traction by equipment as indicated by spinning or churning of
14 wheels or tracks in excess of normal performance, b) inadequate traction
15 without blading wet soil, c) soil displacement in amounts that cause visible
16 increase in turbidity of the downstream waters in a receiving Class I, II,
17 III, or IV waters, d) pumping of road surface materials by traffic, or e)
18 creation of ruts greater than would be created by traffic following normal
19 road watering, which transports surface material to a drainage facility that
20 discharges directly into a watercourse.

21 Soils or road and landing surfaces that are hard frozen are excluded
22 from this definition.

23 "Stable operating surface" means that throughout the period of use, the
24 operating surface of a logging road or landing does not either (1) generate
25 waterborne sediment in amounts sufficient to cause a turbidity increase in
26 downstream Class I, II, III, or IV waters that is visible or would violate
27 applicable water quality requirements; or (2) channel water for more than 50
28 feet that is discharged into Class I, II, III, or IV waters.

29 "Watercourse or Lake Transition Line"

30 (a) for a watercourse with an unconfined channel (a channel with a
31 valley to width ratio at bankfull stage of 4 or greater) means that line
32 defined by the landward margin of the most active portion of the channel zone
33 area readily identified in the field by:

34 (1) no soil development, and

35 (2) riparian vegetation dominated by riverine hardwoods and occasional
36 conifers.

37 If field identification is ambiguous, identification of the 20-year
38 flood stage would delimit this portion of the channel zone.

39 (b) for a watercourse with a confined channel means that line closest
40 to the watercourse or lake where riparian vegetation is permanently
41 established that is the outer boundary of a watercourse's 20-year return
42 interval flood event floodplain. This outer boundary corresponds to an
43 elevation equivalent to twice the maximum depth of the adjacent riffle at
44 bankfull stage. The bankfull stage elevation shall be determined by field
45 indicators and may be verified by drainage area/bankfull discharge
46 relationships.

1 (c) for a lake, it is that line closest to the lake where riparian
2 vegetation is permanently established.

3 "Watersheds with threatened or impaired values" means any planning
4 watershed where populations of anadromous salmonids that are listed as
5 threatened, endangered, or candidate under the State or Federal Endangered
6 Species Acts with their implementing regulations, are currently present or
7 can be restored.

8 (a) The amendments to 14 CCR § 895.1 that were adopted on March 15,
9 2000 and April 4, 2000 will automatically expire on December 31, 2000. The
10 sections listed under this section of the rules shall revert, on that date,
11 to the form in which they existed prior to March 15, 2000.

12 Note: Authority cited: Sections 4551, 4551.5, 4553, 4561, 4561.5, 4561.6,
13 4562, 4562.5, 4562.7 and 4591.1, Public Resources Code. Reference: Sections
14 4512, 4513, 4526, 4551, 4551.5, 4561, 4561.6, 4562, 4562.5, 4562.7, 4583.2,
15 4591.1, 21001(f), 21080.5, 21083.2 and 21084.1, Public Resources Code; CEQA
16 Guidelines Appendix K (printed following Section 15387 of Title 14 Cal.Code
17 of Regulations), and *Laupheimer v. State* (1988) 200 Cal.App.3d 440; 246
18 Cal.Rptr. 82.

17 **Amend § 898 Feasibility Alternatives**

18 After considering the rules of the Board and any mitigation measures
19 proposed in the plan, the RPF shall indicate whether the operation would have
20 any significant adverse impact on the environment. On TPZ lands, the
21 harvesting per se of trees shall not be presumed to have a significant
22 adverse impact on the environment. If the RPF indicates that significant
23 adverse impacts will occur, the RPF shall explain in the plan why any
24 alternatives or additional mitigation measures that would significantly
25 reduce the impact are not feasible.

26 Cumulative impacts shall be assessed based upon the methodology
27 described in Board Technical Rule Addendum Number 2, Forest Practice
28 Cumulative Impacts Assessment Process and shall be guided by standards of
29 practicality and reasonableness. The RPF's and plan submitter's duties under
30 this section shall be limited to closely related past, present and reasonably
31 foreseeable probable future projects within the same ownership and to matters
32 of public record. The Director shall supplement the information provided by
33 the RPF and the plan submitter when necessary to insure that all relevant
34 information is considered.

1 When assessing cumulative impacts of a proposed project on any portion
2 of a waterbody that is located within or downstream of the proposed timber
3 operation and that is listed as water quality limited under Section 303(d) of
4 the Federal Clean Water Act, the RPF shall assess the degree to which the
5 proposed operations would result in impacts that may combine with existing
6 listed stressors to impair a waterbody's beneficial uses, thereby causing a
7 significant adverse effect on the environment. The plan preparer shall
8 provide feasible mitigation measures to reduce any such impacts from the plan
9 to a level of insignificance, and may provide measures, insofar as feasible,
10 to help attain water quality standards in the listed portion of the
11 waterbody.

12 The Director's evaluation of such impacts and mitigation measures will
13 be done in consultation with the appropriate RWQCB.

14 (a) The amendments to 14 CCR § 898 that were adopted on March 15, 2000
15 and April 4, 2000 will automatically expire on December 31, 2000. The
16 sections listed under this section of the rules shall revert, on that date,
17 to the form in which they existed prior to March 15, 2000.

18 Note: Authority cited: Sections 4551 and 4553, Public Resources Code.
19 Reference: Sections 4512, 4513, 4551.5, and 4582.75, Public Resources Code;
20 and *Laupheimer v. State* (1988) 200 Cal.App.3d 440; 246 Cal.Rptr. 82.

21 **Amend § 898.2 Special Conditions Requiring Disapproval of Plans**

22 The Director shall disapprove a plan as not conforming to the rules of
23 the Board if any one of the following conditions exist:

24 (a) Boundaries of the area to be harvested are not clearly delineated
25 in the plan.

26 (b) Public acquisition of the parcel for purposes which would be
27 impaired by timber harvesting, is legislatively authorized, funded and
28 imminent.

29 (c) There is evidence that the information contained in the plan is
30 incorrect, incomplete or misleading in a material way, or is insufficient to
31 evaluate significant environmental effects. The sufficiency of the
32 information provided in a THP to evaluate significant environmental effects
33 shall be judged in light of what is reasonable and necessary.

34 (d) Implementation of the plan as proposed would result in either a
35 "taking" or finding of jeopardy of wildlife species listed as rare,
36 threatened or endangered by the Fish and Game Commission, the National Marine
37 Fisheries Service, or Fish and Wildlife Service, or would cause significant,
38 long-term damage to listed species. The Director is not required to

1 disapprove a plan which would result in a "taking" if the "taking" is
2 incidental and is authorized by a wildlife agency acting within its authority
under state or federal endangered species acts.

3 (e) Implementation of the plan would irreparably damage plant species
listed as rare or endangered by the Department of Fish and Game and when the
timber owner fails to comply with F&GC 1913.

4 (f) Implementation of the plan as proposed would result in the taking
of an individual Northern Spotted Owl prohibited by the Federal Endangered
5 Species Act.

6 (g) Implementation of the plan as proposed would not achieve maximum
sustained production of high quality timber products as provided for by the
rules of the Board, and by the intent of the Act.

7 (h) Implementation of the plan as proposed would cause a violation of
8 any requirement of an applicable water quality control plan adopted or
approved by the State Water Resources Control Board.

9
10 (i) The amendments to 14 CCR § 898.2 that were adopted on March 15,
11 2000 and April 4, 2000 will automatically expire on December 31, 2000. The
12 sections listed under this section of the rules shall revert, on that date,
13 to the form in which they existed prior to March 15, 2000.

14
15 Note: Authority cited: Sections 4551, 4555 and 4582, Public Resources Code.
Reference: Sections 2053, 2080.1, 2090-2097, 2830 and 2835, Fish and Game
16 Code; Sections 4555, 4582.7 and 4582.75, Public Resources Code; Section
51115.1, Government Code; the federal Endangered Species Act of 1973, 16
17 U.S.C. et seq.; and *Laupheimer v. State* (1988) 200 Cal.App.3d 440; 246
Cal.Rptr. 82.

18
19 **Amend §§ 914.8, 934.8, and 954.8 Tractor Road Watercourse Crossing**

20 Watercourse crossing facilities on tractor roads shall be planned,
constructed, maintained, and removed according to the following standards:

21 (a) The number of crossings shall be kept to a minimum. Existing
crossings locations shall be used wherever feasible.

22 (b) A prepared watercourse crossing using a structure such as a bridge,
culvert, or temporary log culvert shall be used to protect the watercourse
23 from siltation where tractor roads cross a watercourse in which water may be
present during the life of the crossing.

24 (c) Crossing facilities on watercourses that support fish shall allow
for unrestricted passage of all life stages of fish that may be present, and
25 for unrestricted passage of water. Such crossing facilities shall be fully
described in sufficient clarity and detail to allow evaluation by the review

1 team and the public, provide direction to the LTO for implementation, and
2 provide enforceable standards for the inspector.

3 (d) Watercourse crossing facilities not constructed to permanent
4 crossing standards on tractor roads shall be removed before the beginning of
5 the winter period. If a watercourse crossing is to be removed, it shall be
6 removed in accordance with 14 CCR 923.3(d) [943.3(d), 963.3(d)].

7 (e) If the watercourse crossing involves a culvert, the minimum
8 diameter shall be stated in the THP and the culvert shall be of a sufficient
9 length to extend beyond the fill material.

10 (f) Consistent with the protection of water quality, exceptions may be
11 provided through the Fish and Game Code and shall be indicated in the plan.

12 (g) The amendments to 14 CCR § 914.8 [934.8, 954.8] that were adopted
13 on March 15, 2000 and April 4, 2000 will automatically expire on December 31,
14 2000. The sections listed under this section of the rules shall revert, on
15 that date, to the form in which they existed prior to March 15, 2000.

16 Note: Authority cited: Sections 4551, 4551.5, and 4553, Public Resources
17 Code. Reference: Sections 4512, 4513, 4527, 4562.5, 4562.7, and 4582, Public
18 Resources Code.

19 **Amend §§ 916, 936, and 956 Intent of Watercourse and Lake Protection.**

20 The purpose of this article is to ~~insure the protection of~~ ensure that
21 the beneficial uses that are derived from the physical form, water quality,
22 and biological characteristics of watercourses and lakes, native aquatic and
23 riparian species, and the beneficial functions of riparian zones are
24 protected from potentially significant adverse site-specific and cumulative
25 impacts associated with timber operations.

It is the intent of the Board to restore, enhance, and maintain the
productivity of timberlands while providing equal consideration for the
beneficial uses of water. Further, it is the intent of the Board to clarify
and assign responsibility, ~~to recognize for recognition of potential and~~
existing impacts of timber operations on the beneficial uses of water,
watercourses and lakes, native aquatic and riparian-associated species, and
the beneficial functions of riparian zones and to ensure adoption of feasible
measures to prevent water pollution related to timber harvesting effectively
achieve compliance with this article. Further, it is the intent of the Board
that the evaluations that are made, and the measures that are taken or
prescribed, be documented in a manner that clearly and accurately represents
those existing conditions and those measures. "Evaluations made" pertain to
the assessment of the conditions of the physical form, water quality, and

1 biological characteristics of watercourses and lakes, including cumulative
2 impacts affecting the beneficial uses of water on both the area of planned
3 logging operations and in the Watershed Assessment Area (WAA). "Measures
4 taken" pertain to the procedures used or prescribed for the restoration,
5 enhancement, and maintenance of the beneficial uses of water.

6 All provisions of this article shall be applied in a manner, which
7 complies with the following:

8 (a) During and following timber operations, the beneficial uses of
9 water, native aquatic and riparian-associated species, and the beneficial
10 functions of riparian zones shall be maintained where they are in good
11 condition, protected where they are threatened, and insofar as feasible,
12 restored where they are impaired.

13 (b) Protection of the quality and beneficial uses of water during the
14 planning, review, and conduct of timber operations shall comply with all
15 applicable legal requirements including those set forth in any applicable
16 water quality control plan adopted or approved by the State Water Resources
17 Control Board. At a minimum, the LTO shall not do either of the following
18 during timber operations:

19 (1) Place, discharge, or dispose of or deposit in such a manner as to
20 permit to pass into the waters of the state, any substances or materials,
21 including, but not limited to, soil, silt, bark, slash, sawdust, or
22 petroleum, in quantities deleterious to fish, wildlife, beneficial functions
23 of riparian zones, or the quality and beneficial uses of water;

24 (2) Remove water, trees or large woody debris from a watercourse or
25 lake, the adjacent riparian area, or the adjacent flood plain in quantities
26 deleterious to fish, wildlife, beneficial functions of riparian zones, or the
27 quality and beneficial uses of water.

28 (c) Protecting and restoring native aquatic and riparian-associated
29 species, the beneficial functions of riparian zones and the quality and
30 beneficial uses of water shall be given equal consideration as a management
31 objective within any prescribed WLPZ and within any ELZ or EEZ designated for
32 watercourse or lake protection.

33 (d) The measures set forth in this Section are meant to enforce the
34 publics historical and legal interest in protection for wildlife, fish, and
35 water quality and are to be used to guide timberland owners in meeting their
36 legal responsibilities to protect public trust resources.

37 (e) The amendments to 14 CCR §§ 916 [936, 956] that were adopted on
38 March 15, 2000 and April 4, 2000 will automatically expire on December 31,
39 2000. The sections listed under this section of the rules shall revert, on
40 that date, to the form in which they existed prior to March 15, 2000.

41 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources
42 Code. Reference: Sections 4512, 4513, 4551.5, 4552, 4562.5, 4562.7,
43 21001(b), (f), 21002 and 21002.1, Public Resources Code; Sections 100, 1243,

1 1243.5, 13001, 13001(f), 13146 and 13147, Water Code; and 33 USC Section
2 1288(b)(2)(F).

3 Amend §§ 916.2, 936.2, and 956.2 Protection of the Beneficial Uses of Water
4 and Riparian Functions.

5 (a) The measures used to protect ~~the beneficial uses of water for each~~
6 watercourse and lake in a logging area shall be determined by the presence
7 and condition of the following values:

8 (1) The existing and restorable quality and beneficial uses of water as
9 specified by the applicable water quality control plan and as further
10 identified and refined during preparation and review of the plan.

11 (2) The restorable uses of water for fisheries as identified by the
12 Department of Fish and Game DFG or as further identified and refined during
13 preparation and review of the plan.

14 (3) Riparian habitat that provides for t~~The biological needs of the~~
15 fish and wildlife native aquatic and riparian-associated species provided by
16 the riparian habitat as specified in 14 CCR 916.4(b) [936.4(b), 956.4(b)].

17 (4) ~~Sensitive near stream~~ conditions near watercourses and lakes as
18 specified in 14 CCR 916.4(a) [936.4(a), 956.4(a)].

19 These values shall be protected from potentially significant adverse impacts
20 from timber operations and restored to good condition, where needed, through
21 a combination of the rules and plan-specific mitigation.

22 (b) The State's waters are grouped into four classes based on key
23 beneficial uses. These classifications shall be used to determine the
24 appropriate minimum protection measures to be applied to the State's waters
25 during the conduct of timber operations. The basis for classification
(characteristics and key beneficial uses) are set forth in 14 CCR 916.5
[936.5, 956.5], Table 1 and the range of minimum protective measures
applicable to each class are contained in Sections 14 CCR 916.3 [936.3,
956.3], 916.4(e) [936.4, 956.4], and 916.5 [936.5, 956.5]

(c) When the protective measures contained in 14 CCR 916.5 [936.5,
956.5] are not adequate to provide protection to beneficial uses, feasible
protective measures shall be developed by the RPF or proposed by the Director
under the provisions of 14 CCR 916.6 [936.6, 956.6], Alternative Watercourse
and Lake Protection, and incorporated in the ~~THP~~ plan when approved by the
Director.

(d) The amendments to 14 CCR § 916.2 [936.2, 956.2] that were adopted
on March 15, 2000 and April 4, 2000 will automatically expire on December 31,
2000. The sections listed under this section of the rules shall revert, on
that date, to the form in which they existed prior to March 15, 2000.

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600 and 5650(c), Fish and Game Code; and 33 USC Section 1288(b)(2)(F).

~~§§ 916.9 [936.9, 956.9] Exclusion of Material from Streams and Lakes.~~

Adopt §§ 916.9, 936.9, and 956.9 Protection and Restoration in Watersheds with Threatened or Impaired Values.

In addition to all other district Forest Practice Rules, the following requirements shall apply in any planning watershed with threatened or impaired values:

(a) Every timber operation shall be planned and conducted to prevent any deleterious interference with the natural recovery of the watershed conditions that primarily limit the values set forth in 14 CCR 916.2 [936.2, 956.2](a) (e.g., no net sediment load increase where sediment is a primary limiting factor; no net thermal load increase where water temperature is a primary limiting factor; no net loss of instream large woody debris or recruitment potential where lack of this value is a primary limiting factor; no substantial increase in peak flows or large flood frequency where peak flows or large flood frequency are primary limiting factors). To achieve this goal, every timber operation shall be planned and conducted to meet the following objectives where they affect a primary limiting factor:

(1) Comply with the terms of a Total Maximum Daily Load (TMDL) that has been adopted to address factors that may be affected by timber operations if a TMDL has been adopted, or not result in no net any measurable sediment load increase to a watercourse system or lake.

1 (2) Result in ~~no~~ any measurable decrease in the stability of a
2 watercourse channel or of a watercourse or lake bank.

3 (3) Result in ~~no~~ any measurable blockage of any aquatic migratory
4 routes for anadromous salmonids or listed species.

5 (4) Result in ~~no~~ any measurable stream flow reductions during critical
6 low water periods except as part of an approved water drafting plan pursuant
7 to 14 CCR 916.9(u) [936.9(u), 956.9(u)].

8 (5) Consistent with the requirements of 14 CCR §§ 916.9(i), 936.9(i),
9 or 956.9(i); Pprotect, maintain, and restore trees (especially conifers),
10 snags, or downed large woody debris that currently, or may in the foreseeable
11 future, provide large woody debris recruitment needed for instream habitat
12 structure and fluvial geomorphic functions.

13 (6) Consistent with the requirements of 14 CCR §§ 916.9(g), 936.9(g),
14 or 956.9(g); Pprotect, maintain, and restore the quality and quantity of
15 vegetative canopy needed to: (i) provide shade to the watercourse or lake,
16 (ii) minimize daily and seasonal temperature fluctuations, (iii) maintain
17 daily and seasonal water temperatures within the preferred range for
18 anadromous salmonids or listed species where they are present or could be
19 restored, and (iv) provide hiding cover and a food base where needed.

20
21 (7) Result in no substantial increases in peak flows or large flood
22 frequency.

23 (b) Pre-plan adverse cumulative watershed effects on the populations
24 and habitat of anadromous salmonids shall be considered. The plan shall
25 specifically acknowledge or refute that such effects exist. Where
appropriate, the plan shall set forth measures to effectively reduce such
effects.

1 (c) Any timber operation or silvicultural prescription within 150 feet
2 of any Class I watercourse or lake transition line or 100 feet of any Class
3 II watercourse or lake transition line shall have protection, maintenance, or
4 restoration of the beneficial uses of water or the populations and habitat of
5 anadromous salmonids or listed aquatic or riparian-associated species as ~~its~~
6 ~~primary significant objectives; harvesting of wood products shall be~~
7 ~~secondary to those objectives.~~

8 Additionally, for evenaged regeneration methods and rehabilitation with
9 the same effects as a clearcut that are adjacent to a WLPZ, a special
10 operating zone shall retain understory and mid-canopy conifers and hardwoods.
11 These trees shall be protected during falling, yarding and site preparation
12 to the extent feasible. If trees that are retained within this zone are
13 knocked down during operations, that portion of the trees that is greater
14 than 6" in diameter shall remain within the zone as LWD. The zone shall be
15 25 feet above Class I WLPZs with slopes 0-30% ~~and above Class II WLPZs~~ and 50
16 feet above Class I WLPZs with slopes > 30%.

17
18 (d) The plan shall fully describe: (i) the type and location of each
19 measure needed to fully offset sediment loading, thermal loading, and
20 potential significant adverse watershed effects from the proposed timber
operations, and (ii) the person(s) responsible for the implementation of each
measure, if other than the timber operator.

21 In proposing, reviewing, and approving such measures, preference shall
22 be given to the following: (i) measures that are both onsite (i.e., on or
23 near the plan area) and in-kind (i.e., erosion control measures where
24 sediment is the problem), and (ii) sites that are located to maximize the
benefits to the impacted portion of a watercourse or lake. Out-of-kind
measures (i.e., improving shade where sediment is the problem) shall not be
approved as meeting the requirements of this subsection.

25 (e) There shall be no timber operations within the channel zone with
the following exceptions:

 (1) timber harvesting that is directed to improve salmonid habitat
through the limited use of the selection or commercial thinning silvicultural
methods with review and comment by DFG.

1 (2) timber harvesting necessary for the construction or reconstruction
2 of approved watercourse crossings.

3 (3) timber harvesting necessary for the protection of public health and
4 safety.

5 (4) to allow for full suspension cable yarding when necessary to
6 transport logs through the channel zone.

7 In all instances where trees are proposed to be felled within the
8 channel zone, a base mark shall be placed below the cut line of the harvest
9 trees within the zone. Such marking shall be completed by the RPF that
10 prepared the plan prior to the preharvest inspection.

11 (f) The minimum WLPZ width for Class I waters shall be 150 feet from
12 the watercourse or lake transition line.

13 (g) Within a WLPZ for Class I waters, at least 85 percent overstory
14 canopy shall be retained within 75 feet of the watercourse or lake transition
15 line, and at least 65 percent overstory canopy within the remainder of the
16 WLPZ. The overstory canopy must be composed of at least 25% overstory
17 conifer canopy post-harvest.

18 Harvesting of hardwoods shall only occur for the purpose of enabling conifer
19 regeneration.

20 (h) For Class I waters, any plan involving timber operations within the
21 WLPZ shall contain the following information:

22 (1) A clear and enforceable specification of how any disturbance or log
23 or tree cutting and removal within the Class I WLPZ shall be carried out to
24 conform with 14 CCR 916.2 [936.2, 956.2](a) and 916.9 [936.9, 956.9](a).

25 (2) A description of all existing permanent crossings of Class I waters
by logging roads and clear specification regarding how these crossings are to
be modified, used, and treated to minimize risks, giving special attention to
allowing fish to pass both upstream and downstream during all life stages.

(3) Clear and enforceable specifications for construction and operation
of any new crossing of Class I waters to prevent direct harm, habitat
degradation, water velocity increase, hindrance of fish passage, or other
potential impairment of beneficial uses of water.

(i) Recruitment of large woody debris for aquatic habitat in Class I
anadromous fish-bearing or restorable waters shall be ensured by retaining
the ten largest dbh conifers (live or dead) per 330 feet of stream channel
length that are the most conducive to recruitment to provide for the
beneficial functions of riparian zones. The retained conifers shall be
selected from within the plan area that lies within 50 feet of the
watercourse transition line.

The RPF may propose alternatives to substitute smaller diameter trees,
trees that are more than 50 feet from the watercourse transition line, or
other alternatives on a site specific basis. The RPF must explain and
justify in the THP why the proposed alternative is more conducive to current
and long-term LWD recruitment, shading, bank stability, and the beneficial
functions of riparian zones.

1 (j) The Director may approve ~~such~~ alternatives provided the alternative
2 practice will achieve the goals of this section. The Director shall not
3 accept for inclusion in a THP any alternative practice as described in this
4 section where ~~one~~ two or more agencies listed in 4582.6 of the PRC and 14 CCR
5 1037.3 have submitted written comments which lead to the Director's
6 conclusion that the proposed alternative will not meet the goals of this
7 section and the agency(ies) participated in the review of the plan, including
8 an on-the-ground inspection.

9
10 (k) Where an inner gorge extends beyond a Class I WLPZ and slopes are
11 greater than 55%, a special management zone shall be established where the
12 use of evenaged regeneration methods is prohibited. This zone shall extend
13 upslope to the first major break-in-slope to less than 55% for a distance of
14 100 feet or more, or 300 feet as measured from the watercourse or lake
15 transition line, which ever is less. All operations on slopes exceeding 65%
16 within an inner gorge shall be reviewed by a CEG prior to plan approval,
17 regardless of whether they are proposed within a WLPZ or outside of a WLPZ.

18 (l) From October 15 to May 1, the following shall apply: (i) no timber
19 operations shall take place unless the approved plan incorporates a complete
20 winter period operating plan pursuant to 14 CCR 914.7(a) [934.7(a),
21 965.7(a)], (ii) unless the winter period operating plan proposes operations
22 during an extended period with low antecedent soil wetness, no tractor roads
23 shall be constructed, reconstructed, or used on slopes that are over 40
24 percent and within 200 feet of a Class I, II, or III watercourse, as measured
25 from the watercourse or lake transition line, and (iii) operation of trucks
and heavy equipment on roads and landings shall be limited to those with a
stable operating surface.

(m) Construction or reconstruction of logging roads, tractor roads, or
landings shall not take place during the winter period unless the approved
plan incorporates a complete winter period operating plan pursuant to 14 CCR
914.7(a) [934.7(a), 965.7(a)] that specifically address such road
construction. Use of logging roads, tractor roads, or landings shall not take
place at any location where saturated soil conditions exist, where a stable
logging road or landing operating surface does not exist, or when visibly
turbid water from the road, landing, or skid trail surface or inside ditch
may reach a watercourse or lake. Grading to obtain a drier running surface
more than one time before reincorporation of any resulting berms back into
the road surface is prohibited.

(n) All tractor roads shall have drainage and/or drainage collection
and storage facilities installed as soon as practical following yarding and
prior to either i) the start of any rain which causes overland flow across or
along the disturbed surface within a WLPZ or within any ELZ or EEZ designated

1 for watercourse or lake protection, or ii) any day with a National Weather
2 Service forecast of a chance of rain of 30 percent or more, a flash flood
3 warning, or a flash flood watch.

4 (o) Within the WLPZ, and within any ELZ or EEZ designated for
5 watercourse or lake protection, treatments to stabilize soils, minimize soil
6 erosion, and prevent the discharge of sediment into waters in amounts
7 deleterious to aquatic species or the quality and beneficial uses of water,
8 or that threaten to violate applicable water quality requirements, shall be
9 applied in accordance with the following standards:

10 (1) The following requirements shall apply to all such treatments.

11 i. They shall be described in the plan.

12 ii. For areas disturbed from May 1 through October 15, treatment shall
13 be completed prior to the start of any rain that causes overland flow across
14 or along the disturbed surface.

15 iii. For areas disturbed from October 16 through April 30, treatment
16 shall be completed prior to any day for which a chance of rain of 30 percent
17 or greater is forecast by the National Weather Service or within 10 days,
18 whichever is earlier.

19 (2) The traveled surface of logging roads shall be treated to prevent
20 waterborne transport of sediment and concentration of runoff that results
21 from timber operations.

22 (3) The treatment for other disturbed areas, including: (i) areas
23 exceeding 100 contiguous square feet where timber operations have exposed
24 bare soil, (ii) approaches to tractor road watercourse crossings between the
25 drainage facilities closest to the crossing, (iii) road cut banks and fills,
26 and (iv) any other area of disturbed soil that threatens to discharge
27 sediment into waters in amounts deleterious to the quality and beneficial
28 uses of water, may include, but need not be limited to, mulching, rip-
29 rapping, grass seeding, or chemical soil stabilizers. Where straw, mulch, or
30 slash is used, the minimum coverage shall be 90%, and any treated area that
31 has been subject to reuse or has less than 90% surface cover shall be treated
32 again prior to the end of timber operations. The RPF may propose alternative
33 treatments that will achieve the same level of erosion control and sediment
34 discharge prevention.

35 (4) Where the undisturbed natural ground cover cannot effectively
36 protect beneficial uses of water from timber operations, the ground shall be
37 treated by measures including, but not limited to, seeding, mulching, or
38 replanting, in order to retain and improve its natural ability to filter
39 sediment, minimize soil erosion, and stabilize banks of watercourses and
40 lakes.

41 (p) As part of the plan, the RPF shall identify active erosion sites in
42 the logging area, assess them to determine which sites pose significant risks
43 to the beneficial uses of water, assess them to determine whether feasible
44 remedies exist, and address in the plan feasible remediation for all sites
45 that pose significant risk to the beneficial uses of water.

46 (q) The erosion control maintenance period on permanent and seasonal
47 roads and associated landings that are not abandoned in accordance with 14
48 CCR 923.8 shall be three years.

49 (r) Site preparation activities shall be designed to prevent soil
50 disturbance within, and minimize soil movement into, the channel of
51 watercourses. Prior to any broadcast burning, burning prescriptions shall be

designed to prevent loss of large woody debris in watercourses, and vegetation and duff within a WLPZ, or within any ELZ or EEZ designated for watercourse or lake protection. No ignition is to occur within any WLPZ, or within any ELZ or EEZ designated for watercourse or lake protection. When burning prescriptions are proposed, the measures or burning restrictions which are intended to accomplish this goal shall be stated in the plan and included in any required burning permit. This information shall be provided in addition to the information required under 14 CCR 915.4 [935.4, 954.4].

(s) Water drafting for timber operations from within a channel zone of a natural watercourse or from a lake shall conform with the following standards:

(1) The RPF shall incorporate into the THP:

(A) a description and map of proposed water drafting locations,

(B) the watercourse or lake classification, and

(C) the general drafting location use parameters (i.e., yearly timing, estimated total volume needed, estimated total uptake rate and filling time, and associated water drafting activities from other THPs).

(2) On Class I and Class II streams where the RPF has estimated that:

(A) bypass flows are less than 2 cubic feet per second, or

(B) pool volume at the water drafting site would be reduced by 10%, or

(C) diversion rate exceeds 350 gallons per minutes, or

(D) diversion rate exceeds 10% of the above surface flow;

no water drafting shall occur unless the RPF prepares a water drafting plan to be reviewed by DFG and approved by the Director.

The water drafting plan shall include, but not be limited to:

(i) disclosure of estimated percent streamflow reduction and duration of reduction,

(ii) discussion of the effects of single pumping operations, or multiple pumping operations at the same location,

(iii) proposed alternatives and discussion to prevent adverse effects (e.g. reduction in hose diameter, reduction in total intake at one location, described allowances for recharge time, and alternative water drafting locations),

(iv) conditions for operators to include an operations log kept on the water truck containing the following information: Date, Time, Pump Rate, Filling Time, Screen Cleaned, Screen Conditions, and Bypass flow observations,

(v) a statement by the RPF for a pre-operations field review with the operator to discuss the conditions in the water drafting plan.

(3) Intakes shall be screened in Class I and Class II waters. Screens shall be designed to prevent the entrainment or impingement of all life stages of fish or amphibians. Screen specifications shall be included in the plan.

(4) Approaches to drafting locations within a WLPZ shall be surfaced with rock or other suitable material to avoid generation of sediment.

(t) No timber operations are allowed in a WLPZ, or within any ELZ or EEZ designated for watercourse or lake protection, under emergency notices or exemption notices except for hauling on existing roads, road maintenance, and operations conducted for public safety.

(u) No salvage logging is allowed in a WLPZ without an approved HCP, an SYP, or an approved plan that contains a section that sets forth objectives, goals, and measurable results for streamside salvage operations.

1 (v) Nonstandard practices (i.e., waivers, exceptions, in-lieu
2 practices, and alternative practices) shall comply with the goals set forth
in subsection (a) above as well as with the other requirements set forth in
the rules.

3 (w) Other measures that would effectively achieve the goals set forth
4 in 14 CCR 916.9(a) [936.9(a), 956.9(a)] may be approved in accordance with 14
CCR 916.6 [936.6, 956.6].

5
6 (x) The provisions of 14 CCR 916.9 [936.9, 956.9] shall not apply to a
7 plan that is subject to an incidental take permit based upon an approved
8 Habitat Conservation Plan that addresses anadromous salmonid protection.

9 (y) This section shall expire on December 31, 2000.

10
11 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources
12 Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and
13 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code;
Sections 1600 and 5650(c), Fish and Game Code; and 33 USC Section
1288(b)(2)(F).

14
15 **Adopt §§ 916.11, 936.11, and 956.11 Effectiveness and Implementation**

16 **Monitoring**

17 Where timber operations will be conducted within a WLPZ, the Director
18 may require a post-harvest evaluation of the effectiveness of the mitigations
and practices designed to protect the watercourse(s) or lake(s) as a
19 condition of plan approval. The Director shall require such an evaluation if
the necessity for the evaluation is supported by substantial evidence in the
record. This evidence may include, but is not limited to, potential land
20 failures, accelerated rate of road construction or harvesting within a
watershed, concentration or intensity of harvesting activity near
21 watercourses, and potential for accelerated windthrow. The design and
implementation of the evaluation shall be done in consultation with the
22 Director, the RWQCB or DFG, and THP submitter, and the sufficiency of the
information requested by the Director shall be judged in light of
23 reasonableness and practicality. The evaluation may comprise procedures
including, but not limited, to:

- 24 (1) Procedures for effectiveness and implementation monitoring,
25 (2) Existing landowner monitoring programs, or
 (3) Photographic monitoring

1 (a) This section shall expire on December 31, 2000.

2
3 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources
4 Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and
5 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code;
6 Sections 1600 and 5650(c), Fish and Game Code; and 33 USC Section
7 1288(b)(2)(F).

8
9
10 **Adopt §§ 916.12, 936.12, and 956.12 Section 303(d) Listed Watersheds**

11 For any planning watershed in which timber operations could contribute
12 to the pollutants or stressors which have been identified as limiting water
13 quality in a water body listed pursuant to 303(d) Federal Clean Water Act,
14 the following shall apply:

15 (a) The Department shall, in collaboration with the appropriate RWQCB
16 and SWRCB, prioritize watersheds in which the following will be done: 1)
17 conduct or participate in any further assessment or analysis of the watershed
18 that may be needed, 2) participate in the development of Total Maximum Daily
19 Load (TMDL) problem assessment, source assessment, or load allocations
20 related to timber operations, and 3) if existing rules are deemed not to be
21 sufficient, develop recommendations for watershed-specific silvicultural
22 implementation, enforcement and monitoring practices to be applied by the
23 Department.

24 (b) The Department shall prepare a report setting forth the
25 Department's findings and recommendations from the activities identified
pursuant to (a) above. The report shall be submitted to the Board and the
appropriate RWQCB. The report shall be made available to the public upon
request and placed on the Boards' website for a 90-day period.

(c) Where the Department has recommended the adoption of watershed
specific rules are needed, the Board shall consider that recommendation as a
proposal for rulemaking under the Administrative Procedures Act (Section
11340 et. seq. Gov Code) and shall begin that process within 180 day
following receipt of that report.

(d) These watershed specific rules shall be developed in collaboration
with the appropriate RWQCB, the landowner(s) or designee with land in the
planning watershed, and other persons or groups within the watershed, and may
also be incorporated into a TMDL implementation plan.

(e) The watershed specific rules shall remain in effect until the
water body has been removed from the 303(d) list, or that the Board finds,
after consulting with the appropriate RWQCB, that timber operations are no
longer a significant source of the pollutant or stressor that limits water
quality in the listed water body.

24
25 (f) This section shall expire on December 31, 2000.

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600 and 5650(c), Fish and Game Code; and 33 USC Section 1288(b)(2)(F).

Amend §§ 923.3, 943.3, and 963.3 Watercourse Crossings

Watercourse crossing drainage structures on logging roads shall be planned, constructed, reconstructed, and maintained or removed, according to the following standards. Exceptions may be provided through application of Fish and Game Code Sections 1601 and 1603 and shall be included in the THP.

(a) The location of all new permanent watercourse crossing drainage structures and temporary crossings located within the WLPZ shall be shown on the THP map. If the structure is a culvert intended for permanent use, the minimum diameter of the culvert shall be specified in the plan. Extra culverts beyond those shown in the THP map may be installed as necessary.

(b) The number of crossings shall be kept to a feasible minimum.

(c) Drainage structures on watercourses that support fish shall allow for unrestricted passage of all life stages of fish that may be present, and shall be fully described in the plan in sufficient clarity and detail to allow evaluation by the review team and the public, provide direction to the LTO for implementation, and provide enforceable standards for the inspector.

(d) When watercourse crossings, other drainage structures, and associated fills are removed the following standards shall apply:

(1) Fills shall be excavated to form a channel ~~which~~ that is as close as feasible to the natural watercourse grade and orientation, and that is wider than the natural channel.

(2) The excavated material and any resulting cut bank shall be sloped back from the channel and stabilized to prevent slumping and to minimize soil erosion. Where needed, this material shall be stabilized by seeding, mulching, rock armoring, or other suitable treatment.

(e) All permanent watercourse crossings that are constructed or reconstructed shall accommodate the estimated 100-year flood flow, including debris and sediment loads.

(ef) Permanent watercourse crossings and associated fills and approaches shall be constructed or maintained to prevent diversion of stream overflow down the road and to minimize fill erosion should the drainage structure become obstructed. The RPF may propose an exception where explained in the THP and shown on the THP map and justified how the protection provided by the proposed practice is at least equal to the protection provided by the standard rule.

(g) Any new permanent culverts installed within class I watercourses shall allow upstream and downstream passage of fish or listed aquatic species during any life stage and for the natural movement of bedload to form a continuous bed through the culvert and shall require an analysis and

1 specifications demonstrating conformance with the intent of this section and
2 subsection.

3 (h) The amendments to 14 CCR §§ 923.3 [943.3, 963.3] that were adopted
4 on March 15, 2000 and April 4, 2000 will automatically expire on December 31,
5 2000. The sections listed under this section of the rules shall revert, on
6 that date, to the form in which they existed prior to March 15, 2000.

7
8 Note: Authority cited: Sections 4551, 4551.4, and 21004, Public Resources
9 Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.5 and 4562.7,
10 Public Resources Code; 33 USC Section 1288(b), 40 CFR 130.2(q); California
11 Case Law: *Natural Resources Defense Council, Inc. v. Arcata Natl. Corp.*
(1972) 59 Cal. App. #d 959, 131 Cal Rptr. 172.

12 **Adopt §§ 923.9, 943.9 and 963.9 Roads and Landings in Watersheds with**
13 **Threatened or Impaired Values.**

14 In addition to all other district Forest Practice Rules, the following
15 requirements shall apply in any planning watershed with threatened or
16 impaired values:

17 (a) Where logging road or landing construction or reconstruction is
18 proposed, the plan shall state the locations of and specifications for road
19 or landing abandonment or other mitigation measures to minimize the adverse
20 effects of long-term site occupancy of the transportation system within the
21 watershed.

22 (b) Unless prohibited by existing contracts with the U.S.D.A. Forest
23 Service or other federal agency, New and reconstructed logging roads shall
24 be no wider than a single-lane compatible with the largest type of equipment
25 specified for use on the road, with adequate turnouts provided as required
for safety. The maximum width of these roads shall be specified in the plan.
These roads shall be outsloped where feasible and drained with water breaks
or rolling dips (where the road grade is inclined at 7 percent or less), in
conformance with other applicable Forest Practice Rules.

1 (c) The following shall apply on slopes greater than 50%:

2 (1) Specific provisions of construction shall be identified and
3 described for all new roads.

4 (2) Where cutbank stability is not an issue, roads may be constructed
5 as a full-benched cut (no fill). Spoils not utilized in road construction
6 shall be disposed of in stable areas with less than 30 percent slope and
7 outside of any WLPZ, EEZ, or ELZ.

8 (3) Alternatively, roads may be constructed with balanced cuts and
9 fills if properly engineered, or fills may be removed with the slopes
10 recontoured prior to the winter period.

11 (d) In addition to the provisions listed under 14 CCR 923.1(e)
12 [943.1(e), 963.1(e)], all permanent or seasonal logging roads with a grade of
13 15% or greater that extends 500 continuous feet or more shall have specific
14 erosion control measures stated in the plan.

15 (e) Where situations exist that elevate risks to the factors set forth
16 in 14 CCR 916.2(b), [936.2(b), 956.2(b)] (e.g., road networks are remote, the
17 landscape is unstable, water conveyance features historically have a high
18 failure rate, culvert fills are large) drainage structures and erosion
19 control features shall be oversized, low maintenance, or reinforced, or they
20 shall be removed before the completion of the timber operation. The method
21 of analysis and the design for crossing protection shall be included in the
22 plan.

23 (f) The provisions of 14 CCR 923.9 [943.9, 963.9] shall not apply to a
24 plan that is subject to an incidental take permit based upon an approved
25 Habitat Conservation Plan that addresses anadromous salmonid protection.

26 (g) This section shall expire on December 31, 2000.

27
28 Note: Authority cited: Sections 4551, 4551.5, 4553, 4562.7 and 21000(g),
29 Public Resources Code. Reference: Sections 751, 4512, 4513, 4551, 4551.5,
30 4562.5, 4562.7, 21000(g), 21001(b) and 21002.1, Public Resources Code;
31 Sections 100, 1243, 13050(f) Water Code; Sections 1600 and 5650(c), Fish and
32 Game Code; and 33 USC Section 1288(b); *Natural Resources Defense Council,*
33 *Inc. v. Arcata Natl. Corp.* (1976) 59 Cal.App. 3d 959, 131 Cal.Rptr. 172.

34 doh: 03/16/2000

35 File: 15 Day Notice Language